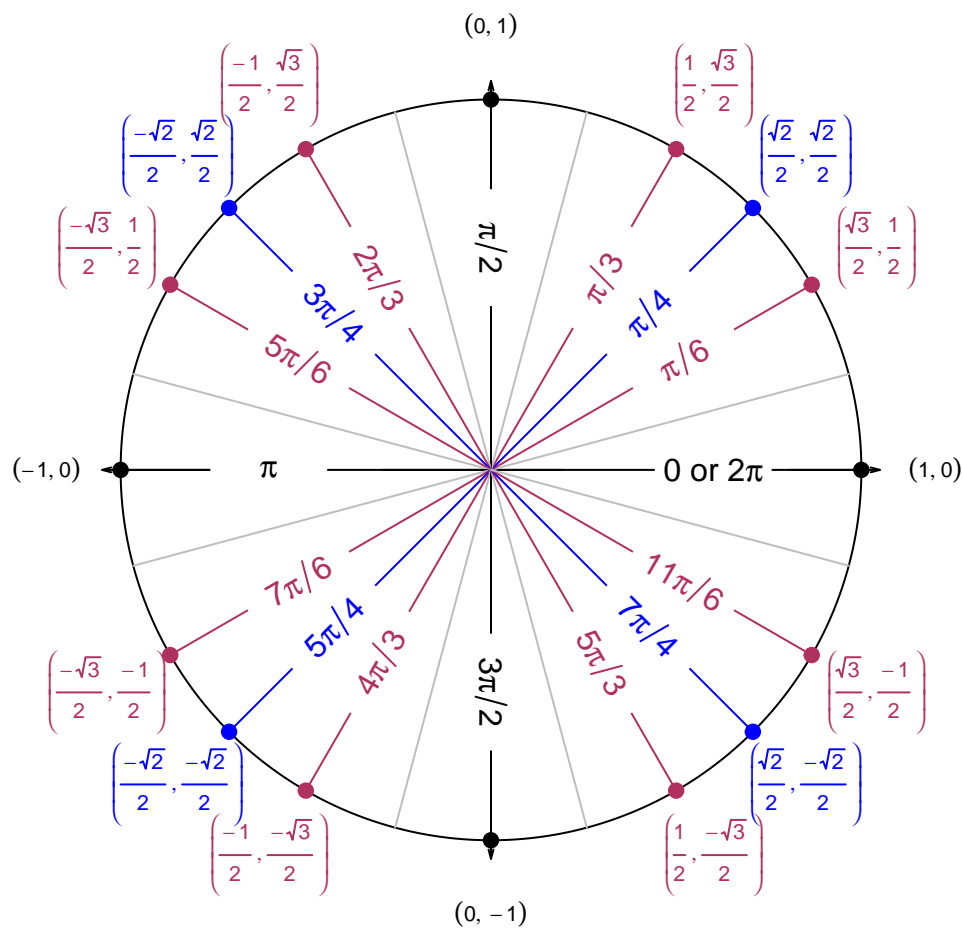


Name: _____

Date: _____

U15WS1: DRAW COSINE AND SINE WAVE FUNCTIONS

A unit circle diagram shows the xy coordinates of special angles. For point (x, y) at angle θ , we define the trigonometric functions so that $\sin(\theta) = y$ and $\cos(\theta) = x$.



In order to graph the sinusoidal wave functions, it will help to use the following decimal approximations:
 $\frac{\sqrt{2}}{2} \approx 0.71$ and $\frac{\sqrt{3}}{2} \approx 0.87$.

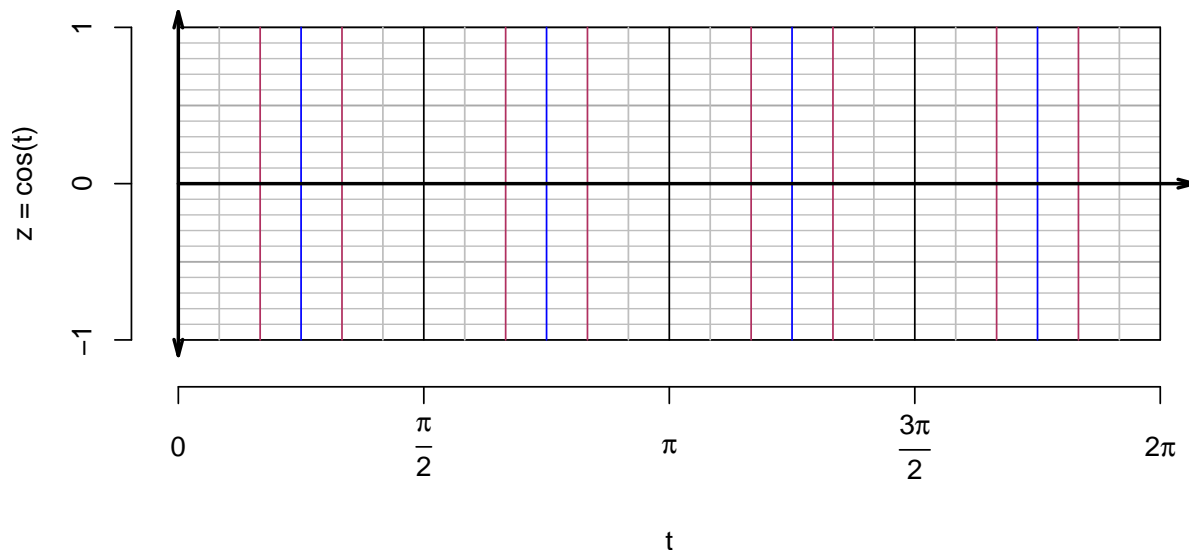
Please make a table relating the angles to the **decimal** values.

θ	0	$\pi/6$	$\pi/4$	$\pi/3$	$\pi/2$	$2\pi/3$	$3\pi/4$	$5\pi/6$	π
$\cos(\theta)$									
$\sin(\theta)$									

θ	π	$7\pi/6$	$5\pi/4$	$4\pi/3$	$3\pi/2$	$5\pi/3$	$7\pi/4$	$11\pi/6$	2π
$\cos(\theta)$									
$\sin(\theta)$									

u15ws1

On a tz plane, plot $z = \cos(t)$. You should use the first and second rows, and all 17 columns, from the first page. Be as accurate as possible. Connect the points with a smooth curve.



On a tz plane, plot $z = \sin(t)$. You should use the first and third rows, and all 17 columns, from the first page. Be as accurate as possible. Connect the points with a smooth curve.

